

**REMARKS**

Reconsideration and allowance in view of the foregoing amendments and the following remarks is respectfully requested.

Claims 1-19 remain pending in the application.

Claims 1-19 are rejected under 35 U.S.C. 101 because the Office Action states that the claimed subject matter is directed to non-statutory subject matter. Applicant respectfully traverses this rejection.

The present invention relates to a "real world application": in fact it is a tool (or a system), e.g. a computer-run expert program (see page 17, lines 25-28 of the specification as amended by the preliminary amendment filed on April 26, 2005). This tool is designed for and used by an expert (an expert is mentioned throughout the specification, see e.g. page 5, two last lines, page 11, lines 15-17, page 13, line 31, and so on). This tool is used for performing calculation that could not be performed by a human within a limited time, more especially when many parameters are involved (see the mathematical expressions throughout the specification).

Two important features of the invention are (more especially step P4 described on page 11):

The specification of the compensatory fuzzy conditions (see page 12, lines 23-25)

Introducing fuzziness by considering the pairs of complementary conditions so as to ensure that the result (the alternative chosen) satisfies certain properties (see page 12, lines 25-30).

The aim of the tool is to ask the expert to specify a certain number of points situated on the boundary between the "we compensate perfectly" zone and the "we compensate a little" zone, and on the boundary between the "we do not compensate at all" zone and the "we compensate a little" zone (see page 13, lines 12-18). In other words, one major step of the claimed method includes in questioning the expert on a set of singular points of the compensation belonging to the boundary between two zones (see page 13, lines 30-32).

The knowledge of these points will make it possible to determine the parameters of the compensation (page 13, lines 18-20), these parameters being computed by the tool. The computation of these parameters is thoroughly explained in the specification (page 38, line 5 to page 69).

To ensure that claim 1 is patentable, Applicant has amended claim 1 in accordance with the Examiners helpful suggestion in the Office Action (page 4, last paragraph) where it is suggested that claim 1 be amended to recite "theorem proving decision support system". Claim 19 has been similarly amended. Accordingly, the §101 rejection should be withdrawn.

Claim 1 and 10 are rejected under 35 U.S.C. 103(a). In response, claim 1 has been amended and is believed to be patentable over any combination of references for the reasons discussed below.

The Examiner has previously conceded that neither Tomita or Tzes teach asking questions to allowing the system to introduce a compensation condition into the non-clearly identifiable rules. Claim 1 has been amended to recite introducing compensation rules into the decision tree and fuzzifying the compensation rules. Further, questions are asked of an expert as opposed to Bottledooren who relies instead on aggregation for compensation from public opinion surveys.

Bottledooren uses fuzzy logic, but does not introduce any compensation condition (i.e. a compensation of a parameter by another parameter) in the general noise annoyance survey: a noise cannot be compensated by another noise.

Tzes merely discloses fuzzyness in modeling, but does not suggest any compensation, since a compensation would be of no use at all in driving a motor. In the same way, it would be a nonsense to use any compensation method in Tomita in order to study manuscripts. The Examiner states that Bottledooren gives numerous examples of aggregation used in compensation and public opinion surveys compare asking questions. Claim 1 has been amended to emphasize the questioning of the expert on a set of singular points of the compensation belonging to the boundary between two zones for one of which the compensation is not clearly expressed..

Hence, any combination of the cited references could never teach or suggest the

method of the present invention. The obvious rejection should be withdrawn.

All objections and rejections having been addressed, it is respectfully submitted that the present application should be in condition for allowance and a Notice to that effect is earnestly solicited.

Early issuance of a Notice of Allowance is courteously solicited.

The Examiner is invited to telephone the undersigned, Applicant's attorney of record, to facilitate advancement of the present application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 07-1337 and please credit any excess fees to such deposit account.

Respectfully submitted,

**LOWE HAUPTMAN HAM & BERNER, LLP**

A handwritten signature in black ink, reading "Kenneth M. Berner". The signature is written in a cursive, flowing style.

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